

Expense and Capital Cost Factors Model Summary

Version 2014V1

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PURPOSE OF EXPENSE AND CAPITAL COST FACTORS MODEL

The Expense and Capital Cost Factors Model (the Factors Model) is an EXCEL-based financial model developed by CenturyLink for the purpose of determining the investment and expense related factors that are used in calculating the costs of CenturyLink's (the Company's) products and services, including TELRIC-based Interconnection/UNE services. The Model is run as a "stand-alone" spreadsheet model that consists of two interrelated sub-modules – the Expense Factors Module and the Capital Cost (Capcost) Factors Module. The factor and capital cost results are then incorporated into a spreadsheet that calculates the annual charge factors for each type of investment for use in final cost study developmental work in the Economic Cost Model (ECM).

CenturyLink's TSLRIC-based cost studies generally follow three basic steps: (1) *define the network element or service*; (2) *develop the investment and/or direct costs for the network element or service*; (3) *apply the annual charge factors for each type of investment to convert the investment amounts to cost amounts*. The charge factors include both *investment-related capital costs* (e.g., depreciation, cost of money, and income tax) and *operating expenses*. This last step is accomplished through the use of various cost causative methodologies within the Factors Model processes. Such methodologies include:

- calculating investment-related operating direct expenses (e.g., maintenance expense) based on annual cost factors that are applied to investments, and
- calculating other operating expenses (e.g., marketing -- product management and sales expenses) based on annual cost factors that are applied to the previously derived investment-related costs or direct expenses.
- applying an appropriate share of common costs to the TSLRIC cost in order to obtain the "total" fully allocated cost.

The Capital Cost Module determines the depreciation, capital return, and income tax effect factors. The factor outputs of this module become inputs to the Expense Factors Module.

The Expense Factors Module calculates factors for the direct network, other direct and support costs and common costs that are to be associated with each of the TSLRIC-based investment, non-recurring, or collocation studies produced by CenturyLink.

EXPENSE FACTORS MODULE

In developing cost study factors, the Expense Factors Module (EFM) computes factors for three general categories of costs: (1) direct network costs (including the development of factors for network operations, network support assets and other operating taxes); (2) other direct and support costs; and, (3) common costs. The first and second cost categories include many individual factors; the third category consists of a single, composite, common cost factor. The factors for each cost group are prepared in a manner that requires that they be appropriately (sequentially) applied to determine the total TSLRIC-based cost. Additionally, an uncollectible factor, which represents the level of retail or wholesale uncollectibles, is developed for application to the TSLRIC (before uncollectible) + Common costs.

“Direct Network Costs” consist of the depreciation and capital costs resulting from the application of factors developed in the Capital Cost Module, and the plant maintenance costs, network operations costs, network support assets, and other operating taxes. Maintenance factors are calculated for each plant account. These are investment-related factors; that is, they are developed to be applied to investment balances, rather than to operating costs. In contrast, the “Direct Network Costs” for network operations, network support assets, and other operating taxes are developed to be applied to the previously calculated network capital and maintenance cost amounts.

Network Operations consist of costs recorded in Account 6512 and the 6530 series of Accounts of the FCC 47 C.F.R. Part 32 accounting rules. These accounts include costs for:

- provisioning (residual)
- power,
- network administration,
- testing,
- plant operations administration, and
- engineering

Network Support Asset costs consist of:

- motor vehicles,
- aircraft,
- special purpose vehicles,
- garage work equipment, and
- other work equipment

Other Operating Taxes recorded in Account 7240 of the FCC 47 C.F.R. Part 32 accounting rules consist of:

- property taxes,
- business and occupation taxes not passed through to customers, and
- FCC and state PUC fees

“Other Direct and Support Costs” include Element-Specific Product/Service Expenses, Billing and Collection costs, Marketing costs (product management, sales, and advertising, where applicable), and General Support Asset costs.

General Support Asset costs consist of:

- land,
- buildings,
- furniture,
- office equipment,
- capital leases – land and buildings, and leasehold improvements,
- building rent expense paid, including the inter-company rent compensation portion
- general purpose computers, and
- computer capital leases

Support Asset costs are recorded in Accounts 6110 – 6123, or if capitalized, in the 2000 series of accounts under FCC 47 C.F.R. Part 32 accounting rules.

”**Common Costs**” include expenses that are required for the operation of the business and the provision of services as a whole (e.g., Executive, Accounting or Human Resources expenses). From an accounting perspective, these costs are generally identified as corporate operations (FCC 47 C.F.R. Part 32 - Account 6700 series and Account 6124) expenses and payment of a proportional share of capitalized general purpose software (Account 52631000). Since these costs cannot typically be directly or indirectly attributed to any one particular service or service grouping, a “Common” cost factor is developed and applied.

Expense Factors Module Calculations

. The general construct of the Expense Factors Module consists of the following four basic steps:

- (1) **Identifying the most current regulated operating expenses incurred by, and the support investments used by, CenturyLink.** To complete this step, data is obtained from the Company’s General Ledger and detail records.
- (2) **Converting the current operating expenses and support investments to forward-looking cost amounts applicable for use in factor development.** Step (2) identifies the forward-looking expenses and investments which are considered to be “*indirect*” costs (Step 3 identifies the “*direct*” costs). Step (2) is generally accomplished by first identifying and removing booked costs that should not be considered in the development of cost factors (i.e., costs already employed as direct costs in other studies, expenses which are separately reimbursed by direct billing, out-of-period or other extraordinary expenditures in any given period, etc.). The remaining costs are then converted to a forward-looking cost amount to be used in the development of factors via the application of productivity and inflation index values. The “productivity” value estimates the gains expected in productivity or efficiency, while the “Inflation” value estimates the amount of inflation (or deflation) anticipated. These values are applied uniformly to all relevant accounts.
- (3) **Identifying the total level of forward-looking direct costs, which will be used as the “*total direct cost denominator*” for the expense-related factors.** The objective of this step is to determine the total level of forward-looking “*direct*” costs, regardless of how they will be ultimately grouped for factor application, which is done as a part of Step (4). All applicable forward-looking costs (both operating expenses and investments) incurred by the Company are considered to be either direct costs or indirect costs (indirect costs were addressed in Step (2); they include Network Operations, Network Support Assets, Operating Taxes, General Support Assets and Common).

Direct costs addressed in Step (3) are those elements in the cost studies that are unique to a specific product/service and are directly identified in the cost studies themselves. They encompass such things as cable and wire facilities, switching investment, programming costs specifically incurred for a particular service, expenses incurred in the performance of activities

classified as non-recurring for which the customer is uniquely charged, etc.. Marketing and Billing & Collection (B&C) costs are also considered to be direct costs at this stage of the Expense and Capital Cost Factors Model's development.

- (4) **Determining the appropriate base (denominator “cost pool” categories) over which each of the various types of operating costs should be allocated in calculating the appropriate expense factors.** This step initially takes the total amount of forward-looking direct costs and groups them into separate, unique categories for purposes of applying the indirect costs determined in Step (2). In this step four operational categories are identified, which are reflective of the four types of cost studies - network facilities/services, non-network services, non-recurring, and leased space/collocation. Two additional and separate Marketing and B&C cost categories are also employed. These categories are used to identify and segregate the current fully distributed level of Marketing and B&C costs incurred by the Company. (These costs are later split between the retail and wholesale market channels to develop unique Marketing and B&C factors for the respective market channels.) The indirect costs identified in Step (2) are then applied to each of these six categories to develop the applicable cost factors. For instance, General Support Asset and Common costs are applicable to each of the six categories but Network Operations costs, Network Support Assets, and Operating Taxes are applicable only to the Network Facilities/Services category.

CAPITAL COST MODULE

Capital costs are the costs associated with a company's cost of money and depreciation. Both are key ingredients in determining a company's cost of providing service. The cost of money encompasses the cost of debt and equity capital, as well as the ratio, or mix, of the two types of capitalization. Depreciation costs are a derivative of the modeled TSLRIC investments and the associated depreciation lives and salvage values for each category of plant investment. The Expense and Capital Cost Factors Model is flexible with regard to both of these key inputs.

CenturyLink's Model allows the user to select either the CenturyLink (default) cost of money option or, alternatively, to separately input specific values for the composite tax rate, the cost of equity, the cost of debt, and the proportion of debt and equity (i.e., the debt / equity capital ratio).

Users of CenturyLink's Model are also allowed to change the Model's depreciation parameters, which are applied to modeled investments. The user can select the CenturyLink input values for account lives and future net salvage values, or they they can separately input alternative values. The depreciation calculations for the selected values also incorporate, and are reliant on, other inputs, such as the composite federal and state income tax rate, cost of debt, cost of equity, and debt ratio. The Model provides the option of employing either Equal Life Group (ELG) or straight-line depreciation.